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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,445	07/09/2003	John Clark	88197.000007	9142
23387	7590	07/14/2004		
Stephen B. Salai, Esq. Harter, Secrest & Emery LLP 1600 Bausch & Lomb Place Rochester, NY 14604-2711			EXAMINER MITCHELL, KATHERINE W	
			ART UNIT 3677	PAPER NUMBER
DATE MAILED: 07/14/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/616,445

Applicant(s)

CLARK ET AL.

Examiner

Katherine W Mitchell

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 12 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. Applicant's information disclosure statement of 11/10/2003 includes US Patent 5250696 to Dunlap et al. as a related reference. Examiner believes this could be an error, as Dunlap et al. is completely unrelated to the pending application, and suggests applicant determine if another reference was intended.

Claim Objections

2. Claim 18 is objected to because of the following informalities: "the module is" in line 1 should be --each module is-- or --the modules are--, as a plurality of modules are claimed. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2, 3 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 2 recites the limitation "the frustrum" in line 2. There is insufficient antecedent basis for this limitation in the claim. As there is no mention of a frustrum earlier in the claim or in claim 10 from which it depends, and "a frustrum" was specifically canceled from claim 1, examiner is assuming applicant intends only to claim that the modules face each other and permit water flow between modules.

- Claims 3 and 13 recite "a connector" in line 2. Claim 3 and 13 depend on claims 1 and 10 respectively, both of which also recite "a connector". Examiner cannot tell if there are one or two distinct connectors being claimed.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1,2,5,7--12,15,17-19, and 21 are rejected under 35 U.S.C. 102(b) as anticipated by Bishop et al. US Patent 5879105, hereafter called Bishop.

Re claim 1,10,11 and 21: Bishop teaches a wave energy dissipating system comprising a plurality of modules, each module (22, Figs 2-14) comprising:

a generally cubical body with front face and opposite sides, a top and bottom, col 6 lines 50-54 and 60-65, a pair of opposed flanges attached to adjacent corners of the body (4 yokes 44 each having a face 46 at each end for a total of 8 faces or flanges), a flange at each corner of the body, flanges arranged as opposed pairs having axially aligned mounting apertures (56) in the flanges 46 arranged to receive a connector extending thru the apertures for connecting adjacent module to one another (Figs 1, 10,12,14, and col 8 lines 1-19) and that the front face has a wave deflecting recessed portion disposed along a longitudinal edge of the body between a pair of opposed flanges (the plane portions "40" and/or "60" for example in Fig 2, considering the 2 flanges with "54" marked on them to be opposed). While each section "40" is not fully

disposed between the pair of flanges defined by one yoke, at least some of each section "40" is disposed between the pair of flanges on a yoke -as best seen in Fig 2, the part of "40" closest to "28" is between the pair of flanges. Further, examiner notes that all the yokes in Fig 2 can be considered to be arranged in opposed pairs having axially aligned apertures {parallel axes, see definition below} and that "40" is also between any pair of yokes/flanges:

a·lign also **a·line** (e·līn¹) *verb*
a·ligned *verb, transitive*

1. To arrange in a line or so as to be parallel: *align the tops of a row of pictures; aligned the car with the curb.*¹

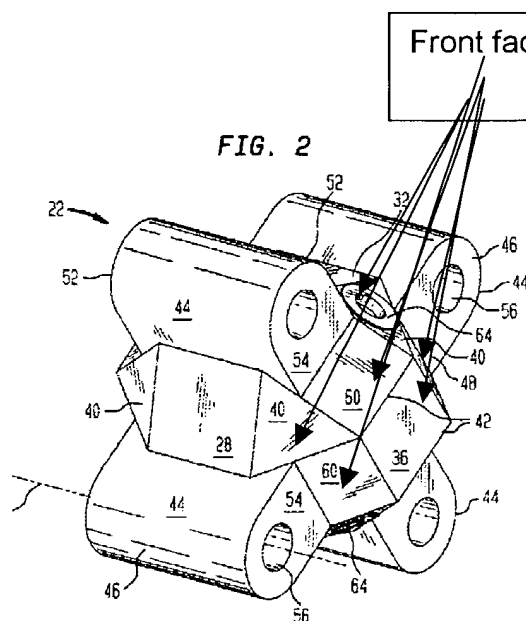
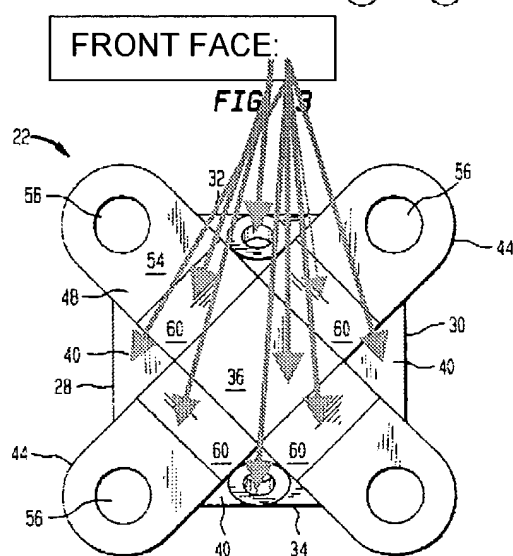
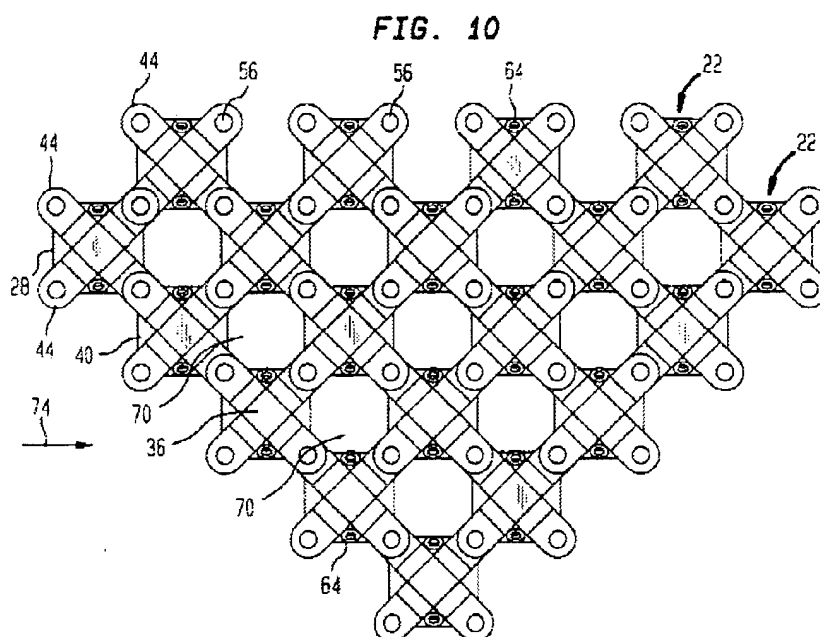
Figs 11 and 13 best show the wave deflection as described in col 7, lines 7-48 and col 8 line 57 – col 9 line 34, and a wave incoming to the face (face includes "36", and the 4 sections "40" and 4 section "60" that are directly adjacent as shown in Fig 2) would inherently be deflected towards the vertical, as 36 is perpendicular to the incoming wave and thus an angled surface at the top (top defined as upward toward sky) of 36 would result in deflection toward vertical.

To clarify the orientation, the modules of Bishop are **capable of** being oriented in a direction facing incoming wave action, as an apparatus claim is concerned with only with structure, not intended use, as long as the structure is capable of performing the intended use. Bishop is capable of such orientation - see Fig 10, and orient the assembly such that the wave is heading into the page (perpendicular to 74 as shown in the figure). In this orientation, "36", all 4 sections "60" (2 shown) that are directly

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adjacent a section "36", and all 4 sections "40" which are directly adjacent the section "36" at its corners (as shown in Fig 2) is considered the front face. Fig 10, copied below, shows what examiner considers is clearly a "generally cubical body", 4 of which are shown on the top row of the figure and individually depicted in Fig 3, also shown below:



Bishop et al. teach a module with 6 generally truncated pyramidal surfaces in Figs 2 and 3. For example, a six sided, (Fig 2) generally cubical body with each face comprising a generally rectangular surface, a plurality of trapezoidal surfaces (60) arranged in a generally pyramidal configuration, with a second rectangular surface (36) is taught in Figs 2-7 and col 5 lines 13-40. Four sides "60" and top "36" form a generally truncated pyramid in Fig. 2, and this pyramidal structure is also a generally rectangular side of the generally cubical module.

Further Regarding claim 10: Spaced apart parallel co-axial flanges as taught by Bishop as discussed above. While examiner agrees a single yoke connects a pair of axially aligned parallel co-axial pairs of flanges, a flange can be considered just the mating surface, since one surface is connected to a second module and the third surface is connected to a third module. Each mating at 2 different modules is considered to have a pair of flanges, and thus each surface of a yoke is considered to be a flange spaced apart from the flange at the other end by the yoke.

flange (flànj) *noun*

A protruding rim, edge, rib, or collar, as on a wheel or a pipe shaft, used to strengthen an object, hold it in place, or attach it to another object.²

Further Regarding claim 21: a connector extending through the apertures for connecting adjacent modules to one another is taught in col 7 lines 9 - col 8 lines 47:

the attaching member 58 consists of marine rubber cables, such as resilient rods used to interconnect the protruding ends 46 of each one of the modules 22 with, in some instances, four other separate and

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discrete modules 22. The rods 58 are formed of marine rubber which is extremely resilient and strong to withstand thousands of pounds of force repeatedly being exerted on the system.

Re claims 2, 12: As best assumed by examiner, a frustrum facing a like frustrum of an adjacent module is shown in Fig 11 and 13. Note the water flow restriction shown in Fig 11.

Re claims 5, 15: Connectors extending longitudinally thru the recessed portion are taught in col 7 lines 9 col 8 lines 47.

Re claims 7-8, 17-18: A brace across the top of attached modules, forming a floating structure of buoyant modules, is taught in col 8 lines 1-34 and col 9 lines 28-33. 28-33.

Re claims 9 and 19: Bishop shows in Figs 10 and 12 the modules connected both horizontally and vertically.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3-4 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bishop et al. US Patent 5879105 in view of Dougherty US Patent 4027486.

Bishop teaches a flexible rod (58) connecting a first and second module in col 9 lines 24-34 and col 6 lines 14-20. However, Bishop et al. use cables as the connecting rods and does not teach rigid rods. Dougherty teaches rigid rods {bolts, 47,54} through flange apertures to connect multiple breakwater modules in Figs. 4 and 5, col 4 lines 51-

68 and col 5 lines 13-23. Dougherty notes in col 4 lines 65-68 that flexible cables could be used with different connecting disc flanges instead of the bolts used with the spool flanges. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Bishop to include rigid connector rods as taught by Dougherty in order to connect modules with conventional connectors available cheaply and standardly.

9. Claims 6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bishop et al. US Patent 5879105. As discussed above, Bishop teaches all the elements except a frustrum of a rectangular pyramid standing out from the planes of each face/side/top/bottom of the cubical body. Bishop does teach a pyramidal shape standing out from the planes of each face/side/top/bottom of the cubical body, as best seen in Fig. 12. Note that the shape formed from 40/28/40, as well as 60/36/60, is broadly considered a frustrum of a pyramid. However, Bishop does not have a *rectangular* pyramid formed from 40/28/40. It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have made all the projections the same shape, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8, and substituting similar shapes with no criticality or unexpected results involves only routine skill in the art.

Response to Arguments

10. Applicant's arguments filed 5/12/04 have been fully considered but they are not persuasive.

11. In response to applicant's argument that the apertures were arranged to receive a connector and the face was for disposition in a direction facing incoming wave action and the recessed portion is arranged to deflect and turn an incoming wave, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Examiner explained in detail in the rejections above exactly what orientation and facets are being considered in making the rejection and how it reads on the claims, especially regarding the recess. Examiner clarified in the rejection above what is considered a flange, and the definition of 'axially aligned' used in the rejection.

12. Examiner considers a bolt to be a "non-stretch connector" capable of allowing limited transverse flexibility and limited relative vertical movement between adjacent modules.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine W Mitchell whose telephone number is 703-305-6713. The examiner can normally be reached on Mon - Thurs 10 AM - 8 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kwm
7/8/04



ROBERT J. SANDY
PRIMARY EXAMINER